



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,526	02/12/2004	Chun-Yung Huang	3624-0154P	4154
2292	7590	01/06/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			HUNTER, ALVIN A	
			ART UNIT	PAPER NUMBER
			3711	

DATE MAILED: 01/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

e

<b>Office Action Summary</b>	<b>Application No.</b> 10/776,526	<b>Applicant(s)</b> HUANG, CHUN-YUNG	
	<b>Examiner</b> Alvin A. Hunter	<b>Art Unit</b> 3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                         |                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

The indicated allowability of claims 10-17 are withdrawn in view of Applicant's admission and Helmsteter et al. (USPN ). Rejections based on the reference(s) follow.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 6-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admission in view of Lu (USPN 6780124) and Helmstetter et al. (USPN 6238302).

Regarding claims 1, 6, 8 and 18-20, Applicant admits that it is old and conventional to place a striking plate within a recess to form a welding channel wherein a welding material is placed there into. Applicant does not admit to it being old and conventional to use protrusions for the placement of the striking plate within the recess. Lu discloses a club head having a recess wherein a striking plate having protrusion thereon is inserted into the recess and then welded to the club head body. Lu does not disclose the protrusions being in the same plane as that of the striking plate. Helmstetter et al. discloses a club head having a recess wherein a striking plate having a plurality of recess in the same plane of the striking plate are used to hold the striking

Art Unit: 3711

place in place for subsequent permanent attaching procedure. Though Helmstetter does not disclose the attaching procedure being welding, it teaches the use of protrusions for attaching the striking plate to a club head body. One having ordinary skill in the art would have found it obvious to use protrusions, as taught by Lu and Helmstetter et al., in order to hold the striking plate in place during subsequent attaching procedure.

Regarding claim 2, Applicant admits in the background of the invention that it is old and conventional for the club head to have a stepped portion within the recess for supporting a striking face and, therefore, would have been obvious to incorporate for such reason (See Pages 1 and 2).

Regarding claims 3 and 4, Applicant does not disclose why the distance of protrusions from the inner perimeter and the width is critical in order to attain the disclosed invention. One having ordinary skill in the art would have drawn from Lu that the distance between each protrusion may be of any width and the distance of the protrusions from the inner perimeter may be of any distance. The factors would have been determining by the materials used and size of the club head; therefore, making the dimensions obvious.

Regarding claim 7, Helmstetter et al. notes that the protrusions may be of a number of shapes including semi-circular.

Regarding claim 9, Applicant admits that it is old and conventional to use braze welding for attaching the striking plate to the club head body.

Regarding claims 10, 14, and 16, Applicant admits that it is old and conventional to place a striking plate within a recess to form a welding channel wherein a welding

Art Unit: 3711

material is placed there into. Applicant does not admit to it being old and conventional to use protrusions for the placement of the striking plate within the recess. Lu discloses a club head having a recess wherein a striking plate having protrusion thereon is inserted into the recess and then welded to the club head body. Lu does not disclose the protrusions being in the same plane as that of the striking plate. Helmstetter et al. discloses a club head having a recess wherein a striking plate having a plurality of recess in the same plane of the striking plate are used to hold the striking plate in place for subsequent permanent attaching procedure. Though Helmstetter does not disclose the attaching procedure being welding, it teaches the use of protrusions for attaching the striking plate to a club head body. Applicant does not disclose any advantages as to having the protrusions on the club head body versus having the protrusions on the striking plate. It would appear that in either case no unexpected result would occur from the difference in arrangement and would therefore, be an matter of design choice. One having ordinary skill in the art would have found it obvious to use protrusions, as taught by Lu and Helmstetter et al., either on the club head body or the striking plate in order to hold the striking plate in place during subsequent attaching procedure.

Regarding claim 11, see the above regarding claim 2.

Regarding claim 12 and 13, see the above regarding claims 3 and 4.

Regarding claim 15, see the above regarding claim 7.

Regarding claim 17, see the above regarding claim 9.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admission in view of Lu (USPN 6780124) and Helmstetter et al. (USPN 6238302) further in view of Su (USPN 5713800).

Regarding claim 5, Applicant's admission in view of Lu and Helmstetter et al. does not disclose the protrusion having an inclined bottom surface. Su shows, in Figure 3, the protrusions having an inclined bottom surface. One having ordinary skill in the art would have drawn therefrom Figure 3 that the inclined surface help facilitate insertion of the striking face being that the outer periphery of the club head body is smaller than the interior with the groove. This allows for the striking face to be bent to where the protrusions do not create any obstruction while the striking face is being inserted. Therefore, having the bottom of the protrusions inclined would have been obvious because of the above.

Claims 1-9 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu (USPN 6780124).

Regarding claim 1, Lu discloses a golf club head comprising a body having a recess in a front side thereof, and a striking plate including a striking face on the front side thereof for striking a golf ball, a plurality of positioning protrusions projecting from a perimeter of the striking plate wherein the positioning protrusions are adapted to provide a tolerance in an assembling step so as to define a welding channel thereof and connected to the recession of the body in a welding step by a welding portion formed on the welding channel such that the welding portion securely mounts the striking plate in the recess of the body and wherein the striking plate is inserted into the recess of the

Art Unit: 3711

body and the positioning protrusions engage with an inner perimeter delimiting the recess and simplifying assembling and positioning for a subsequent welding procedure. Lu does not disclose the protrusions plastically deforming when engaging the inner perimeter. Lu teaches the protrusions for the sole purpose of holding the striking face in position while welding it to the club head. One having ordinary skill in the art would have sought to use techniques such as snap-fitting which plastic deformation occurs in order to hold the striking face in position while being welded; therefore, one having ordinary skill in the art would have found it obvious to have the protrusions plastically deform in order to facilitate securing the striking face to the club head body.

Regarding claims 3 and 4, Applicant does not disclose why the distance of protrusions from the inner perimeter and the width is critical in order to attain the disclosed invention. One having ordinary skill in the art would have drawn from Lu that the distance between each protrusion may be of any width and the distance of the protrusions from the inner perimeter may be of any distance. The factors would have been determining by the materials used and size of the club head; therefore, making the dimensions obvious.

Regarding claim 6, Lu discloses the plurality of protrusions defining a space for receiving filler (See Figure 5 and Column 3, lines 27 through 39).

Regarding claim 7, Applicant does not disclose why the shape of the protrusion is critical in order to attain the invention. Lu discloses cylindrical shaped protrusions in which perform equally as that of the applicant's protrusions. One having ordinary skill in

the art would have found it obvious to have protrusions of any shape so long as the protrusion facilitate attachment of the face plate to the club head body.

Regarding claim 8, Lu discloses the welding procedure being high energy welding (See Summary of the invention).

Regarding claim 9, the type of welding claimed by the applicant refers to a product by process. One would have found Lu to meet this limitation being that the final product is the same.

Regarding claim 18, Lu discloses a golf club head comprising a body having a recess in a front side thereof, and a striking plate including a striking face on the front side thereof for striking a golf ball, a plurality of positioning protrusions projecting from a perimeter of the striking plate wherein the positioning protrusions are adapted to provide a tolerance in an assembling step so as to define a welding channel thereof and connected to the recession of the body in a welding step by a welding portion formed on the welding channel such that the welding portion securely mounts the striking plate in the recess of the body and wherein the striking plate is inserted into the recess of the body and the positioning protrusions engage with an inner perimeter delimiting the recess and simplifying assembling and positioning for a subsequent welding procedure. Lu does not disclose the protrusions plastically deforming when engaging the inner perimeter. Lu teaches the protrusions for the sole purpose of holding the striking face in position while welding it to the club head. One having ordinary skill in the art would have sought to use techniques such as snap-fitting which plastic deformation occurs into order to hold the striking face in position while being welded; therefore, one having



Art Unit: 3711

ordinary skill in the art would have found it obvious to have the protrusions plastically deform in order to facilitate securing the striking face to the club head body. Lu discloses the welding procedure being high energy welding (See Summary of the invention Page 5). The type of welding claimed by the applicant refers to a product by process. One would have found Lu to meet this limitation being that the final product is the same.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lu (USPN 6780124) in view of applicant's admission.

Regarding claim 2, Lu does not disclose have a stepped portion for supporting the striking plate. Applicant admits in the background of the invention that it is old and conventional for the club head to have a stepped portion within the recess for supporting a striking face and, therefore, would have been obvious to incorporate for such reason (See Pages 1 and 2).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lu (USPN 6780124) in view of Su (USPN 5713800).

Regarding claim 5, Lu does not disclose the protrusion having an inclined bottom surface. Su shows, in Figure 3, the protrusions having an inclined bottom surface. One having ordinary skill in the art would have drawn therefrom Figure 3 that the inclined surface help facilitate insertion of the striking face being that the outer periphery of the club head body is smaller than the interior with the groove. This allows for the striking face to be bent to where the protrusions do not create any obstruction while the striking

face is being inserted. Therefore, having the bottom of the protrusions inclined would have been obvious because of the above.

### ***Response to Arguments***

Applicant's arguments filed 7/18/05 have been fully considered but they are not persuasive. Applicant argues that Lu does not teach snap fitting. The applicant appears to be rather confused to the rejection made by the examiner. Lu teaches the face insert being held in place for a welding procedure. The fact the face insert is held in place and Lu does not make any mentioning of the face plate fall out of the recess when welding would indicate that the face plate is held in place by the protrusions and the recess. The reference to "snap fitting" was just an example of a way in which the face insert is held in place. "Snap-fitting" was not intended to be use as a limitation being taught by Lu; it was only used to show that any type of attaching means for holding the face insert to the club head would have been obvious. Since the usage of "snap-fitting" has been clarified, the examiner disagrees with the arguments that the face insert is not held in place to prevent falling for the reasons stated above. Also, the background of the invention of Lu discuss the disadvantages of commonly known methods of welding a face insert to a club head body, wherein the face insert moves resulting in an uneven weld and angle striking surface. Also the claim still only recites a product by process (See *In re Garnero* 162 USPQ 221). Welding only refers to how the striking plate is attached. The welding does not provide any unexpected result. Helmstetter et al. (previously cited prior art) teaches the use of protrusions for holding for holding the striking plate in place subsequent to an attaching procedure wherein the protrusions

Art Unit: 3711

deform to hold the striking plate in place. Applicant already notes that filling a welding channel for attaching a striking plate to the club head body is known (See Applicant's background of the Invention). For these reasons, the above rejection has been furnished.

### ***Conclusion***

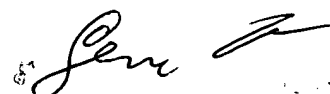
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin A. Hunter whose telephone number is (571) 272-4411. The examiner can normally be reached on Monday through Friday from 7:30AM to 4:00PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Kim, can be reached on 571-272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AAH

Alvin A. Hunter, Jr.



**EUGENE KIM  
PRIMARY EXAMINER**